

### REMARKS

The Applicants respectfully request reconsideration and allowance.

The Applicants also request consideration, initialing, and return of the IDS filed February 14, 2007. If this IDS raises any new issues, the Applicants invite the Examiner to telephone the undersigned to review the issues and accelerate prosecution.

### CLAIMS STATUS

After the present amendments, the pending claims are 1-4, 6, 8-13, 17-19, 22-26, and 30-33. The only independent claim is claim 1. The Applicants have resolved the objections raised by the Examiner. Moreover, the rejections under 35 U.S.C. § 112, ¶ 2 are moot in view of the present amendments (some claims are cancelled; the offending language “characterized” is removed from claims 17-19; claims 23-24 more particularly focus the claims).

### REJECTIONS UNDER 35 U.S.C. § 102 (e)

Claims 1-4, 6-23 and 25-33 stand rejected as anticipated by Lazar *et al.* (“Lazar”, US 2004/0208751). The Applicants respectfully traverse.

The differences between Lazar and the claimed invention are numerous. Lazar teaches and suggests a fundamentally different pumping system: an electroosmotic pumping system (see title of Lazar, see Abstract). Lazar describes its electroosmotic pumping system at for example paragraph 28. Lazar does not teach a pumping system different than an electroosmotic pumping system. The electroosmotic pumping system is noted in the Applicant’s specification to require a high voltage to achieve high pressure, and this is a disadvantage. (see specification, page 2) The electroosmotic pumping system does not generate gaseous species in the pump chamber. See also specification background section and reference to US Patent No. 6,572,749 for electro-osmotic flow systems.

In contrast, the claimed invention recites a plurality of electrolysis pumps, not electroosmotic pumps. The electrolysis pumps comprise a plurality of electrodes and a fluid

in contact with the electrodes, wherein the fluid is such that it is adapted to generate a gaseous species when a bias is applied to the electrodes. See amended claim 1.

In sum, Lazar does not teach all the elements of the claimed invention. The Applicants therefore respectfully request withdrawal of the anticipation rejection.

#### REJECTIONS UNDER 35 U.S.C. § 103

Claims 5 and 24 stand rejected as obvious over Lazar and Kaduce (Journal of Lipid Research, Vol. 24, 1983, pp. 1398-1403). The Applicants respectfully traverse. However, this rejection is now moot in view of the cancellation of claims 5 and 24.

The Applicants, before closing, also respectfully submit that none of the presently pending claims are rendered obvious by Lazar, taken alone or in combination with a secondary reference as Lazar leads away from the presently claimed invention. Lazar suggests use of high voltage electroosmotic pumping methods which is very different from low voltage electrolysis methods. An advantage of the presently claimed invention is that low voltage can be used.

#### DOUBLE PATENTING

Finally, claim 1 stands provisionally rejected on the ground of non-statutory obviousness-type double patenting over claim 1 of co-pending Application No. 11/177,505 (2006/0193748) which is a related case which has not yet been examined. The Applicants propose to address this rejection when, if ever, it becomes a non-provisional rejection.

#### CONCLUSION


The Applicants believe that the present application is in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested. The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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